

Attorney's Docket No. 032831-002  
Patent

## CLAIMS

What Is Claimed Is:

1. A transformer, comprising:
  - a magnetic core having a substantially toroidal shape;
  - a plurality of conductors distributed around the magnetic core, each conductor partially enclosing a portion of the core and being adapted to be electrically connected to form a first winding; and
  - a single sheet of metallic material formed to partially enclose portions of the core, edges of the sheet being adapted to be electrically connected to form a second winding.
2. The transformer of claim 1, wherein the formed sheet provides substantially uniform distribution of current around the core annulus.
3. The transformer of claim 2, wherein the sheet is electrically equivalent to a single turn.
4. A transformer, comprising:
  - a magnetic core having a substantially toroidal shape;
  - a plurality of conductors distributed around the magnetic core, each conductor partially enclosing a portion of the core and being adapted to be electrically connected to form a first winding; and
  - a single sheet of metallic material formed to substantially enclose the core and the first winding, edges of the sheet being adapted to be electrically connected to form a second winding.
5. The transformer of claim 4, wherein the formed sheet provides substantially uniform distribution of current around the core annulus.

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6. The transformer of claim 5, wherein the sheet is electrically equivalent to a single turn.

7. A transformer, comprising:  
a magnetic core having a substantially toroidal shape;  
at least one winding applied to the core, each of the at least one winding enclosing at least a portion of the core annulus, thereby forming a wound core; and  
a single sheet of metallic material formed to substantially enclose the wound core.

8. The transformer of claim 7, wherein the formed sheet forms an additional winding.

9. The transformer of claim 8, wherein the additional winding provides substantially uniform distribution of current around the core annulus.

10. The transformer of claim 9, wherein the additional winding is electrically equivalent to a single turn.

11. A printed circuit assembly comprising:  
a printed circuit board having a plurality of conductive traces;  
a transformer electrically connected to the printed circuit board, the transformer having a magnetic core and a plurality of conductors, each conductor partially enclosing a portion of the core and being adapted to be electrically connected;  
wherein at least some of the plurality of conductors are electrically connected in series to at least some of the conductive traces to form a first winding; and  
wherein at least some of the plurality of conductors are electrically connected in series to at least some of the conductive traces to form a second winding, the second winding being separate from the first winding.